

detected 20, the answering gateway 3 suppresses the voice path to the packet network 5. When the CRe/MRe tone terminates, the answering gateway returns to the voice mode 17 and again monitors the telephony link with the answering modem 4 for a modem signal. If either an ANS tone or ANSam tone is received from the answering modem 4, then the answering gateway 3: (1) suppresses the voice path to the packet network 5; (2) transitions to a G.711 pass-through mode of operation; and (3) conveys the presence of the ANS/ANSam tone over the packet network 5 to the originating gateway 18 using a signaling event in accordance with RFC 2833.

[0041] While in the G.711 pass-through mode, the answering gateway 3 monitors both the telephony link with the answering modem 4 and the packet network 5 link with the originating gateway 2. If the answering gateway 3 detects an LLMR indication from the originating gateway 2, then the originating modem 1 is ready to support a V.34+ data modulation protocols and the answering gateway 3 transitions to an LLMR processing state 23. On the other hand, if the answering gateway 3 detects a V.34 facsimile relay indication from the originating gateway 2, the originating modem 1 is prepared to support a V.34 facsimile protocol and the answering gateway 3 transitions to a V.34 facsimile relay processing state 22. Lastly, if the ANS/ANSam tone terminates before the originating modem sends a CM signal, the originating modem 1 is only prepared to support non-V.34+ modulation protocols 21. In this event, the answering gateway 3 enables the voice path to the packet network 5 and enables its V.21 flag detector. Thereafter, if V.21 flags generated by the answering modem 4 are detected, the answering gateway 3 transitions to a facsimile relay processing state 24.